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DATE MAILED: 05/24/2010

NOTICE OF ALLOWANCE AND FEE(S) DUE

27305 7590 05/24/2010 HOWARD & HOWARD ATTORNEYS PLLC 450 West Fourth Street Royal Oak, MI 48/067 EXAMINER
PENG, KUO LIANG
ART UNIT PAPER NUMBER
1706

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | | |
|---|-------------|----------------------|---------------------|------------------|--|--|--|
| 10/562,656 | 11/24/2006 | Toru Masatomi | 71,051-026 | 6287 | | | |
| TITLE OF INVENTION; COATING COMPOSITION | | | | | | | |

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 08/24/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

| appropriate. All further indicated unless correcte maintenance fee notifical | correspondence includir ed below or directed oth | or transmitti ig the Patent ierwise in Bl | , advance o ock 1, by (| rders and notification of a) specifying a new con | f ma | intenance fees wi ondence address; | II be and/or | mailed to the current (b) indicating a sepa | correspondence address a trate "FEE ADDRESS" fo |
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| | | | | L | | | | | (Signature) |
| | | | | L | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | | FIRST NAMED INVENTO | OR | | ATTO | RNEY DOCKET NO. | CONFIRMATION NO. |
| 10/562,656 TITLE OF INVENTION | 11/24/2006 COATING COMPOSI | TION | | Toru Masatomi | | | | 71,051-026 | 6287 |
| APPLN, TYPE | SMALL ENTITY | ISSUE F | EE DUE | PUBLICATION FEE DU | E | PREV. PAID ISSUE | FEE | TOTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$15 | 10 | \$300 | | \$0 | | \$1810 | 08/24/2010 |
| EXAM | INER | ART I | JNIT | CLASS-SUBCLASS | | | | | |
| PENG, KU | O LIANG | 17 | 96 | 525-100000 | _ | | | | |
| "Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A | ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignee is ident h in 37 CFR 3.II. Comp | nge of Corres 'Indication f ed. Use of a | spondence orm Customer | | ative ngle l or age ttorn be pr type pate an as | registered patent ly, firm (having as a ent) and the name eys or agents. If n rinted. | memb s of up o nam | er a 2 | ocument has been filed fo |
| Please check the appropri | iate assignee category or | categories (v | vill not be p | rinted on the patent): | O I | ndividual 🖵 Cor | rporati | on or other private gro | oup entity Governmen |
| 4a. The following fee(s): Issue Fee Publication Fee (N | o small entity discount p | ermitted) | 4 | b. Payment of Fee(s): (P A check is enclosed Payment by credit of The Director is here overpayment, to De | d. card. | Form PTO-2038 | is atta | ched. | shown above) ficiency, or credit any n extra copy of this form). |
| | s SMALL ENTITY state | is. See 37 CF | | ☐ b. Applicant is no le | | | | | |
| NOTE: The Issue Fee and interest as shown by the i | d Publication Fee (if req records of the United Sta | iired) will no tes Patent an | t be accepte I Trademark | d from anyone other that Office. | ın the | applicant; a regis | tered a | attorney or agent; or th | e assignee or other party i |
| Authorized Signature | | | | | | Date | | | |
| Typed or printed name | | | | | | Registration No | | | |
| This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this but firginia 22313-1450. DC 13-1450. | FR 1.311. Ti U.S.C. 122 a USPTO. Tir den, should NOT SEND | ne information of 27 CFR me will vary be sent to the FEES OR | on is required to obtain of 1.14. This collection is depending upon the independent of the e Chief Information Off COMPLETED FORMS | or ret estin divid ficer, TO | tain a benefit by the nated to take 12 m dual case. Any con U.S. Patent and 1 THIS ADDRESS. | e publ inutes nment Traden SENI | ic which is to file (and to complete, includin s on the amount of tin hark Office, U.S. Depo O TO: Commissioner | by the USPTO to process g gathering, preparing, an- me you require to complet artment of Commerce, P.O. for Patents, P.O. Box 1450 |

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| 27305 7. | 590 05/24/2010 | | EXAMINER | | | |
| HOWARD & HO | OWARD ATTORNE | PENG, KUO LIANG | | | | |
| 450 West Fourth S | | ART UNIT | PAPER NUMBER | | | |
| Royal Oak, MI 48 | 067 | 1796 | | | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 522 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 522 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/562,656 MASATOMI ET AL. Notice of Allowability Examiner Art Unit Kuo-Liana Pena 1796 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 5/12/10 RCE. 2. The allowed claim(s) is/are 1-21. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413),

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

Paper No./Mail Date

of Biological Material

Information Disclosure Statements (PTO/SB/08).

4. T Examiner's Comment Regarding Requirement for Deposit

Paper No./Mail Date

9. ☐ Other .

7.

Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

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DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed May 12, 2010 has been entered. Claim 1 is amended. Now, Claims 1-21 are pending.

- Claim rejection(s) under 35 USC 112 in the previous Office Action (Paper No. 20100213) is/are removed.
- Claim rejection(s) under 35 USC 103 in the previous Office Action
 (Paper No. 20100213) is/are removed.

Allowable Subject Matter

- Claims 1-21 are allowed.
- 5. The following is an examiner's statement of reasons for allowance:

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The present invention is directed to

The present claims are allowable for at least the following reason(s) over the closest references: JP765 (JP 10-101765) and JP668 (JP 04-103668).

JP765 discloses a composition comprising a vinvl polymer derived from a monomer mixture containing vinyl monomer represented by formula (a) where R^1 can be methacryloxypropyl group, n is 0 and m is 3, γ -(meth)acryloxypropyltrimethoxysilane, etc., a hydroxy group-containing vinyl monomer, and alkyl (meth)acrylates in the presence of an azo-based initiator; a condensation catalyst such as an organotitanium compound, an organoaluminum compound, etc.; a solvent; and alkoxysilanes such as γ aminopropyltri(m)ethoxysilane, etc. ([0006], [0012], [0025]-[0026], [0029]-[0033], [0050], [0052]-[0054] and Examples) However, JP765 does not teach or fairly suggest a composition comprising a vinyl polymer derived from a monomer mixture consisting essentially of the presently claimed monomers. Notably, the foregoing hydroxy group-containing vinyl monomer contains a *latent* hydroxy group that would substantially affect the resulting vinyl polymer.

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JP668 discloses a composition comprising a polymer derived from a monomer mixture containing monomers (a)-(e). Monomer (a) can be γ -(meth)acryloxypropyltrimethoxysilane, etc., optionally (meth)acryloxyalkyl tris(trialkylsiloxy)silane. Monomer b) can be epoxy group-containing free radical-polymerizable ethylenically unsaturated monomers. Monomer c) can be *hydroxy group*-containing free radical-polymerizable ethylenically unsaturated monomers. Monomer e) can be an alkyl (meth)acrylate. Monomer d) can be (meth)acryloxypropyl tris(trimethylsiloxy)silane in the presence of an azo-based initiator. (page 3, upper left column to lower left column, page 5, upper left column, page 6, lower columns, page 7, lower right column and Examples) However, JP668 does not teach or fairly suggest a composition comprising a vinyl polymer derived from a monomer mixture *consisting* essentially of the presently claimed monomers. Notably, the foregoing hydroxy group-containing free radical-polymerizable ethylenically unsaturated monomer and epoxy group-containing freeradical-polymerizable ethylenically unsaturated monomer contain a latent hydroxy group and a *latent* epoxy group, respectively, which would substantially affect the resulting polymer.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on

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access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp May 21, 2010

> /Kuo-Liang Peng/ Primary Examiner, Art Unit 1796